## Math 153-Quiz 3

September 8, 2016
Name $\qquad$
Score $\qquad$

Show all work to receive full credit. Supply explanations when necessary.

1. (7 points) The following frequency distribution shows the costs (in dollars) of 30 portable GPS navigators.

| GPS Costs (\$) | Frequency |
| :---: | :---: |
| $65-104$ | 6 |
| $105-144$ | 9 |
| $145-184$ | 6 |
| $185-224$ | 4 |
| $225-264$ | 2 |
| $265-304$ | 1 |
| $305-344$ | 2 |

(a) What are the class boundaries associated with the first class listed above?
(b) What is the class width?
(c) If the frequency distribution was changed to a relative frequency distribution, what number would be associated with the class "145-184"?
(d) If the frequency distribution was changed to a cumulative frequency distribution, what number would be associated with the class " $\leq 224$ "?
(e) What are the class midpoints?
(f) Do the costs appear to be normally distributed? If so, explain why you think so. If not, describe the type of distribution.
2. (3 points) Using class boundaries to separate the horizontal axis, sketch the histogram associated with the frequency distribution above. Label your axes. (If you need more space, use the back.)

